

## PERFORMANCE

### Processor

Intel® Core™ i9-13900, 24C (8P + 16E) / 32T, Max Turbo up to 5.6GHz, P-core 2.0 / 5.2GHz, E-core 1.5 / 4.2GHz, 36MB

### Processor Sockets

1x FCLGA1700

### Integrated Graphics

Integrated Intel UHD Graphics 770

### Discrete Graphics

1x NVIDIA® RTX A2000 12GB

### Chipset

Intel W680 Chipset

### Memory

2x 16GB SO-DIMM DDR5-4800 Non-ECC

### Memory Slots

Four DDR5 SO-DIMM slots, dual-channel capable

### Max Memory<sup>[1]</sup>

Up to 128GB (4x 32GB DDR5 SO-DIMM)

### M.2 SSD RAID Controller

Integrated NVMe® controller

### M.2 SSD Drive

1x 1TB SSD M.2 2280 PCIe® 4.0x4 Performance NVMe Opal

### HDD Controller

Integrated SATA controller

### SATA/SAS Drive

None

### Storage Support<sup>[2]</sup>

Up to 1x 2.5" HDD + 2x M.2 SSD

- 2.5" HDD up to 1TB
- M.2 SSD up to 4TB each

### Audio Chip

High Definition (HD) Audio, Realtek® ALC897-Q codec

### Power Supply

300W 90% Adapter

## DESIGN

### Keyboard

USB Traditional Keyboard, Black, English (EU)

### Mouse

USB Calliope Mouse, Black

### Expansion Slots

Two PCIe slots with one PCIe 4.0 x16 and one PCIe 3.0 x8.

- Slot 1: PCIe 4.0 x16 (via MXM to PCIe riser card), low profile, 75W, double-width
- Slot 2: PCIe 3.0 x8 (x4 lanes), low profile, 25W

### M.2 Slots

- Two M.2 PCIe Gen 4x4 slots (for SSD)
- One M.2 slot (for WLAN)

### Bays

1x 2.5" disk bay (optional, comes with disk)

### Dust Filter

None

### Dimensions (WxDxH)<sup>[3]</sup>

87 x 223 x 202 mm (3.43 x 8.78 x 7.95 inches)

### Weight<sup>[4]</sup>

3.6 kg (7.94 lbs, maximum configuration)

## CONNECTIVITY

### Onboard Ethernet

Intel I225-LM + I210-AT, 2x RJ-45, 2.5GbE + GbE

### Optional Ethernet

None

### WLAN + Bluetooth<sup>[5]</sup>

Intel Wi-Fi® 6E AX211, 11ax 2x2 + BT5.1, vPro®

### Front Ports

- 1x USB 3.2 Gen 2
- 2x Thunderbolt™ 4
- 1x headphone / microphone combo jack (3.5mm)

### Rear Ports

- 4x USB 3.2 Gen 2
- 3x DisplayPort™ 1.2
- 1x Ethernet (2.5GbE RJ-45)
- 1x Ethernet (GbE RJ-45)

### Optional Rear Ports (configured)

None

## SECURITY & PRIVACY

### Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

### Physical Locks

Kensington® Security Slot™, 3 x 7 mm

### Chassis Intrusion Switch

Chassis Intrusion Switch

## MANAGEABILITY

### System Management<sup>[6]</sup>

Intel vPro Enterprise with Intel AMT 16

## SERVICE

### Base Warranty

3-year, Onsite

### Included Upgrade

1Y Premier Support from 3Y Onsite Windchill bundles (CPN)

## CERTIFICATIONS

### Green Certifications<sup>[7]</sup>

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered
- RoHS compliant
- TCO Certified 9.0

### ISV Certifications

Please visit [ISV certifications for Lenovo® Workstations](#)

### Mil-Spec Test

MIL-STD-810H military test passed

## SOFTWARE

### Operating System

Windows® 11 Pro, Polish / English

### Bundled Software

None

## MODEL

**TopSeller** : Yes

**Announce Date** : 2023-04-24

**EAN / UPC / JAN** : 0196804899688

**End of Support** : 2031-05-24



Product image is a sample, it may not match the real color of this model

Note:

[1] The max memory is based on the test results with current Lenovo memory offerings.

[2] The storage capacity supported is based on the test results with current Lenovo storage offerings.

[3] The system dimensions may vary depending on configurations.

[4] The system weight is approximate and based on results in.....

· Lenovo reserves the right to change specifications without notice.

To see more note information, please link to

<https://psref.lenovo.com/Detail/2235?M=30HA000PPB>

## Premier Support - A direct 24x7x365 line to our most elite technicians.



Advanced technical support, 24x7x365, in more than 100 markets



Technical Account Managers for proactive relationship and escalation management



Comprehensive hardware & OEM software support



Priority on service delivery and repair parts



Single point of contact for simplified end-to-end case management



Lenovo Service Connect Portal for customized reporting and product support

## Accidental Damage Protection - Protection of your PC from the unexpected.

Experience shows that a significant portion of devices may be damaged (and not covered under warranty) in the first three years. Lenovo's Accidental Damage Protection service covers accidents beyond the system warranty such as drops, spills, bumps and even electrical surges. Make sure your new device has maximum protection, avoid unplanned costs and get peace of mind.

## Base Warranty - Included with the systems you purchase, default 1- or 3-year coverage window.

## Warranty Extensions & Upgrades - Service and protection that's right for your circumstances.

- Pick Up & Return Courier
- Onsite Support
- Technician Installed Customer
- Replaceable Unit Service
- International Warranty Upgrade

Lenovo may not offer the products, services or features discussed in this document in all regions. Lenovo may withdraw an offering at any time. Information is subject to change without notice. Consult your local representative for information on offerings available in your area. Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. Lenovo provides this publication "as is" without warranty of any kind, either express or implied, including the implied warranties of merchantability or fitness for a particular purpose.

## Recommended Accessories



### Kensington MicroSaver 2.0 Cable Lock from Lenovo

4XEON80914

Protect your device. Lenovo offers the latest standard in device security - the MicroSaver 2.0 Cable Lock From Lenovo. Engineered to be the smallest, strongest lock for laptops and other devices, the MicroSaver 2.0 re...

## Recommended Services

BETTER	4Y Premier Support upgrade from 1Y Premier Support (5WS1F52299)
GOOD	3Y Premier Support upgrade from 1Y Premier Support (5WS1B61706)

For a full list of accessories and services, please visit:  
<https://smartfind.Lenovo.com>

**Lenovo**

**PSREF**  
Product Specifications  
Reference